



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R09-OAR-2021-0549; FRL-8856-02-R9]

Second 10-Year Maintenance Plan for the Indian Wells Valley PM₁₀ Planning Area; California

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is taking final action to approve the “Indian Wells Valley Second 10-Year PM₁₀ Maintenance Plan” (“Indian Wells Second Maintenance Plan” or “Plan”) as a revision to the state implementation plan (SIP) for the State of California. The Indian Wells Second Maintenance Plan includes, among other elements, a base year emissions inventory, a maintenance demonstration, contingency provisions, and motor vehicle emissions budgets for use in transportation conformity determinations. The EPA is finalizing these actions because the SIP revision meets the applicable statutory and regulatory requirements for such plans and motor vehicle emissions budgets.

DATES: This rule is effective [Inset date 30 days after date of publication in the *Federal Register*].

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA-R09-OAR-2021-0549. All documents in the docket are listed on the <https://www.regulations.gov> web site. Although listed in the index, some information is not publicly available, e.g., Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available through <https://www.regulations.gov>, or please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section for additional availability information. If you need assistance in a language other than English or if you are a person with disabilities who

needs a reasonable accommodation at no cost to you, please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section.

FOR FURTHER INFORMATION CONTACT: Ashley Graham, Air Planning Office (ARD-2), EPA Region IX, 75 Hawthorne Street, San Francisco, CA 94105, (415) 972-3877, or by email at *graham.ashleyr@epa.gov*.

SUPPLEMENTARY INFORMATION: Throughout this document, “we,” “us,” and “our” refer to the EPA.

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I. Summary of Proposed Rule

On October 13, 2021, the EPA proposed to approve the Indian Wells Second Maintenance Plan submitted by the California Air Resources Board (CARB) on July 30, 2020, as a revision to the California SIP.¹ In doing so, we proposed to find that the Indian Wells Second Maintenance Plan adequately demonstrates that the Indian Wells Valley planning area will maintain the 1987 annual national ambient air quality standards (NAAQS or “standards”) for particulate matter of ten microns or less (PM₁₀) through the year 2025 (i.e., for more than 10 years beyond the first 10-year maintenance period). We also proposed to find that the Plan includes sufficient contingency provisions to promptly correct any violation of the PM₁₀ standards that may occur. Lastly, we proposed to find the motor vehicle emissions budgets in the Plan for direct PM₁₀ for the years 2020 and 2025 adequate and to approve the budgets for transportation conformity purposes because they meet all applicable criteria for such budgets including the adequacy criteria under 40 CFR 93.118(e).

The motor vehicle emissions budgets that the EPA proposed to find adequate and to

¹ 86 FR 56848.

approve are shown in Table 1. The EPA announced the availability of the Plan and related motor vehicle emissions budgets on the EPA’s transportation conformity website on October 13, 2021, and requested comments by November 12, 2021. We received no comments in response to the adequacy review posting.

Table 1 – Transportation Conformity Budgets for the Indian Wells Valley PM₁₀ Area (PM₁₀ tons per day, annual average)

Source Category	2020	2025
Motor Vehicle Emissions Budget	0.40	0.50

Motor vehicle emissions budgets calculated are rounded up to the nearest tenth of a ton per day.

Source: Indian Wells Second Maintenance Plan, Table 5.

II. Public Comments and EPA Responses

The EPA’s proposed action provided a 30-day public comment period that ended on November 12, 2021. We received one comment submission from a private citizen.² The comments are included in the docket for this action and the remainder of this section provides a summary of the comments and the EPA’s responses.

Comments Summary

The commenter raises two main concerns with the EPA’s proposed approval of the Indian Wells Second Maintenance Plan. The commenter’s first concern is that the Plan is “mostly informed by models that may have inadequate data supporting them.” The commenter acknowledges that “models can be helpful at providing insight into trends in data and helping to predict what will happen in the future” but expresses concern that the Plan “relies too heavily on them.” The commenter notes that there is only one monitoring station in the Indian Wells Valley planning area and recommends that additional monitoring stations throughout the planning area (including near one of the airports in the city of Ridgecrest) would provide greater insight into PM₁₀ emissions trends. The commenter also notes that emissions data were obtained from owners and operators of industrial point sources and states that these data may not be accurate

² Comment dated October 14, 2021, from Elaina Porter to Docket ID No. EPA-R09-OAR-2021-0549.

because they rely on the owners to track their emissions.

The commenter's second main concern is "that the plan does not address how emissions would be limited." The commenter asserts that "the plan shows projections for how the emissions in the area of concern are expected to change between now and 2025, [but that] they never specifically stated why there would be any increases in emissions or how they are hoping to combat these increases in emissions." The commenter asserts that the maintenance plan would be more effective if it addressed off-road emissions from airplanes and questions the contribution of emissions from the Naval Air Weapons Station China Lake, asserting that the facility may contribute fugitive dust emissions to the Indian Wells Valley planning area.

Aside from these two concerns, the commenter states that "the plan is well laid out and should work quite well for the area once it is implemented."

EPA Responses

As discussed in the EPA's proposal, the EPA interprets, through guidance, CAA section 175A's requirement that the state submit a revision to the SIP "to provide for the maintenance" of the NAAQS, to permit the state to do so using different methods.³ One method permits a state to demonstrate maintenance of the NAAQS in an area by showing that projected emissions of a pollutant or its precursors in a future year will not exceed the actual levels of those same pollutants and precursors in the attainment inventory, i.e., an inventory of actual emissions from one of the three years making up the design value during which the area was attaining the NAAQS. The Indian Wells Second Maintenance Plan relies on this approach and includes an emissions inventory representing actual emissions in 2013 (i.e., 10 years after redesignation, or the final year of the first maintenance period). The Plan also provides an updated inventory of actual emissions in 2017 and projected emissions through 2025 (i.e., 12 years beyond the expiration of the first 10-year maintenance period) for sources in the Indian Wells Valley

³ See 86 FR 56848, 56852, citing memorandum dated September 4, 1992, from John Calcagni, Director, EPA Air Quality Management Division, to Regional Office Air Division Directors, Subject: "Procedures for Processing Requests to Redesignate Areas to Attainment", 9-11.

planning area. We note that CAA section 175A requires only that the plan provide for maintenance for 20 years after an area is redesignated, but the State provided projections demonstrating maintenance for 22 years.

With regards to the commenter's concern that the emissions inventories in the Plan rely too heavily on models, we note that the requirements for PM₁₀ emissions inventories are set forth in the Air Emissions Reporting Requirements (AERR) rule.⁴ The EPA has provided additional guidance to states for developing PM₁₀ emissions inventories in "PM₁₀ Emissions Inventory Requirements," EPA-454/R-94-033 (September 1994) and "Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations" (May 2017).

Under the AERR, states are required to report comprehensive emissions inventories to the EPA every three years.⁵ All states, including California, require facilities within their jurisdictions to report their emissions to the states. CARB estimates stationary point source emissions based on annual reports submitted by the local air districts, which reflect actual emissions from industrial point sources reported to local air districts by facility operators. The local air districts are responsible for working with facility operators to compile estimates, using source testing, direct measurement, or engineering calculations. Because area sources often occur over a large geographic area, emissions for these source categories are estimated using various models and methodologies. Similarly, emissions from on-road mobile sources are estimated using the latest EPA-approved version of CARB's Emission FACtor model (EMFAC) based on activity data from the Kern Council of Governments, and off-road mobile source emissions are estimated using a suite of category-specific models. Projected inventories are derived by applying expected growth trends for each source category based on historical trends, current conditions, and economic and demographic forecasts. CARB provides website links to additional

⁴ Codified at 40 CFR part 51, subpart A.

⁵ 40 CFR 51.30(b).

information on each of the methodologies and models used in the Plan and has established quality assurance and quality control processes to ensure the integrity and accuracy of the emissions inventories.⁶

As discussed in the EPA's proposal, the EPA reviewed CARB's emissions inventory development methodologies and the resulting emissions inventories in the Indian Wells Second Maintenance Plan and determined that the inventories were developed consistent with EPA regulations and guidance;⁷ that the projected inventories are based on reasonable methods, growth factors, and assumptions; and that the inventories are based on the most current information available at the time the Plan was being developed. Projections of direct PM₁₀ emissions show that future emissions increases through 2025 are within 1.6 percent of emissions in 2017 and below emissions in 2013, both of which reflected attainment conditions in the Indian Wells Valley planning area.⁸ Therefore, we find that the emissions inventories in the Indian Wells Second Maintenance Plan rely on actual emissions information, where available, and that where the State relies on models and other methodologies to supplement actual emissions information, that reliance is appropriate. We also find that CARB has quality assurance and quality control procedures that are complete, adequate, and acceptable to ensure the accuracy of the model inputs and model results. Furthermore, to address potential uncertainties in the emissions inventories, the Eastern Kern Air Pollution Control District has committed to continue to review the inputs and assumptions used to develop the emissions inventories on an annual basis and to monitor ambient air quality to verify continued attainment.⁹

Regarding ambient air quality monitoring, the EPA disagrees with the commenter's concerns about the need for additional monitors in the Indian Wells Valley area. Each year, CARB is required to submit an Annual Network Plan to establish that its monitoring network

⁶ Indian Wells Second Maintenance Plan, Appendix D.

⁷ Air Emissions Reporting Requirements, 40 CFR part 51, subpart A; "PM₁₀ Emissions Inventory Requirements," EPA-454/R-94-033 (September 1994); and "Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations" (May 2017).

⁸ 86 FR 56848, 56853.

⁹ Id.

meets applicable statutory requirements and is consistent with applicable guidance. CARB's most recent Annual Network Monitoring plan addressing the PM₁₀ NAAQS requirements in the Indian Wells Valley planning area is the "Annual Network Plan, Covering Monitoring Operations in 25 California Air Districts, July 2022" ("Annual Network Plan"), which contains additional information and analysis on the planning area's monitoring sites and instrumentation.¹⁰ This Annual Network Plan reflects CARB's approach to meeting the federal monitoring requirements for PM₁₀,¹¹ which are based on population and air quality conditions in each Metropolitan Statistical Area (MSA). The Indian Wells Valley is located within the Bakersfield, California MSA ("Bakersfield, CA MSA"). Based on population and air quality conditions in the Bakersfield, CA MSA, a minimum of four to eight monitoring sites are required.¹² There are a total of six PM₁₀ monitoring sites in the Bakersfield, CA MSA, including the Ridgecrest monitoring site located in the Indian Wells Valley planning area, and the minimum monitoring requirement for PM₁₀ is met. The Ridgecrest monitoring site is a "neighborhood scale" site within the Bakersfield, CA MSA.¹³ Neighborhood scale PM₁₀ sites "represent conditions throughout some reasonably homogeneous urban sub-region with dimensions of a few kilometers"... and these "PM₁₀ sites provide information about trends and compliance with standards because they often represent conditions in areas where people commonly live and work for extended periods."¹⁴

In addition, CARB is required to submit to the EPA a network assessment every five years that includes a determination of whether the network meets monitoring objectives, such as compliance with ambient air quality standards and providing air pollution data to the public in a timely manner, and whether any new sites are needed to meet these objectives.¹⁵ This regular review by CARB evaluates whether the existing PM₁₀ monitoring network provides an adequate

¹⁰ CARB, Annual Network Plan, July 2022.

¹¹ 40 CFR part 58, Appendix D, section 4.6.

¹² Annual Network Plan, 31.

¹³ Id. at Appendix A.

¹⁴ 40 CFR part 58, Appendix D, section 4.6(b)(3).

¹⁵ 40 CFR 58.10(d).

measure of PM₁₀ air quality in the Indian Wells Valley. CARB's 2020 Monitoring Network Assessment stated that "the Eastern Kern Air Pollution Control District (EKAPCD) believes the existing monitoring network adequately captures population exposure, transport, and high concentrations and should be maintained in its current configuration."¹⁶ CARB provides the public opportunities to comment on any proposed changes to the monitoring network in the Annual Network Plan before the plan is submitted to the EPA for formal approval of all network modifications. The EPA approved CARB's Annual Network Plan on October 28, 2022.¹⁷

In response to the commenter's concern that the Plan does not sufficiently address how emissions would be limited, we note that the Indian Wells Second Maintenance Plan discusses the development of rules controlling PM₁₀ emissions in section II.B ("Rule Development") and lists the control measures that contributed to attainment of the PM₁₀ NAAQS in section III.B ("Factors that Contributed to Attainment"). These control measures will continue to limit emissions in the Indian Wells Valley PM₁₀ planning area. The Plan describes the methods and assumptions CARB used to develop the emissions projections upon which the maintenance demonstration relies, including the growth forecasts for point, areawide, and mobile sources. Appendix C ("CEPAM Emission Projections by Summary Category") presents detailed emissions information for the years 2017 through 2025 by source category, and Appendix D ("IWV Precursor Emission Inventories") provides emissions inventory documentation. The Indian Wells Second Maintenance Plan discusses anticipated population and industry growth in the area in section IV ("IWV Growth"), noting that the area "... has not had any significant changes since 1990, and no significant changes are projected to occur during the second maintenance period." As noted above, the EPA finds that these methods and assumptions are reasonable and that the inventories are based on the most current information available at the time the Plan was developed.

¹⁶ CARB, 2020 Monitoring Network Assessment, October 2020.

¹⁷ Letter dated October 28, 2022, from Gwen Yoshimura, Manager, Air Quality Analysis Office, EPA Region IX, to Sylvia Vanderspek, Chief, Air Quality Planning Branch, CARB.

Regarding fugitive dust emissions from the Naval Air Weapons Station, China Lake, we note that the “Fugitive Dust Control Plan for the Naval Air Weapons Station, China Lake, California (September 1, 1994)” (“Fugitive Dust Control Plan”), prepared pursuant to District Rule 402 (“Fugitive Dust”),¹⁸ established controls to limit emissions from unpaved roads, disturbed vacant land, and open storage piles at Naval Air Weapons Station, China Lake. On May 7, 2003, as part of our action redesignating the Indian Wells Valley planning area to attainment, the EPA approved the Fugitive Dust Control Plan.¹⁹ We found that the plan meets the reasonably available control measures requirement of CAA section 189(a)(1)(C) and concluded that the measure was responsible, in part, for bringing the Indian Wells Valley planning area into attainment of the PM₁₀ NAAQS.²⁰ The Indian Wells Second Maintenance Plan references the Fugitive Dust Control Plan in section III.B (“Factors that Contributed to Attainment”).

Finally, in response to the commenter’s suggestion that the Plan would be more effective if it addressed emissions from aircraft, we note that of the 1.15 tons per day (tpd) of PM₁₀ emissions from aircraft in the Indian Wells Valley, 80 percent (0.92 tpd) are from military aircraft at the Naval Air Weapons Station, China Lake.²¹ As discussed above, the fugitive dust sources that contribute to these emissions are subject to controls outlined in the Fugitive Dust Control Plan. Thus, a majority of off-road emissions from aircraft are addressed by the Plan. With regards to aviation, we note that the authority to establish emissions standards for aircraft lies with the EPA and that states are preempted from adopting any emissions standard for aircraft or aircraft engines that differs from any standards promulgated by the EPA.²² Given that the District does not have authority to control emissions from aircraft engines, including government aircraft from military flight operations at the Naval Air Weapons Station, China Lake, it focused its control strategy on the fugitive dust source categories.

¹⁸ Indian Wells Second Maintenance Plan, Appendix E.

¹⁹ 68 FR 24368, 24368.

²⁰ Id.

²¹ Email dated March 7, 2022, from Jeremiah Cravens, EKAPCD, to Ashley Graham, EPA Region IX, Subject: “Question re fugitive dust emissions from aircraft.”

²² See 40 CFR part 87.

III. Air Quality Conditions Since Proposal

As part of our proposal, we evaluated quality-assured, certified, and complete data available at the time (i.e., through 2020).²³ These data indicated that there had been one exceedance of the PM₁₀ NAAQS in the Indian Wells Valley planning area in 2019 and one exceedance in 2020, resulting in an attaining three-year design value of 0.7.²⁴ In 2021, there were three additional exceedances of the PM₁₀ NAAQS in the area. These additional exceedances in 2021 caused the number of exceedances recorded at the air monitor averaged over three consecutive years (i.e., 2019–2021) to be greater than 1.05. However, we do not think these data contradict the EPA’s finding that the State’s plan provides for maintenance of the PM₁₀ NAAQS under CAA section 175A(b). The District and CARB provided information to the EPA about the five exceedances that occurred in 2019–2021 that explained that the exceedances were not within the State’s control.²⁵ The information provided indicates that the 2019 exceedance was caused by wildfire smoke and wind gusts, the 2020 and two of the 2021 exceedances were caused by wildfire smoke, and the third 2021 exceedance was a result of fugitive dust transported by a high wind event. The EPA has reviewed the information provided by the State regarding the 2019–2021 exceedances, and we agree that this information does not call into question the EPA’s proposed approval of the Indian Wells Second Maintenance Plan as providing for maintenance of the PM₁₀ NAAQS. We note as well that the State’s analysis and the EPA’s evaluation are consistent with the proposed changes to the maintenance plan that the EPA is approving in this final action to evaluate data that may have been influenced by certain events in determining whether contingency provisions should be triggered.

As part of this final action, the EPA has also reviewed data available through June 2022,

²³ 86 FR 56848, 56850.

²⁴ Id.

²⁵ See email dated September 2, 2022, from Sylvia Vanderspek, CARB, to Gwen Yoshimura, EPA Region IX, Subject: “Initial Notification Submittal - Eastern Kern Indian Wells PM10 2nd Maintenance Plan Contingency,” including attachments. See also memorandum dated September 8, 2022, from Ashley Graham, EPA Region IX, to Docket ID No. EPA-R09-OAR-2021-0549.

and so far, there has been one additional exceedance in the Indian Wells Valley planning area.²⁶ Given the EPA's agreement that the 2021 exceedances do not call into question the EPA's proposal to approve the Indian Wells Second Maintenance Plan as providing for maintenance of the NAAQS, the State is not required at this time to submit additional information and analyses for the 2022 exceedance, because such exceedance, without the 2021 exceedances, would not on its own cause a violation of the NAAQS. Upon the effective date of this final action, if additional exceedances occur in 2022 or a later year such that the number of exceedances averaged over three consecutive years is greater than 1.05, per section V of the Plan, the State will be required to submit information regarding those exceedances if it wishes to request that the exceedances be excluded from the contingency trigger calculation. The EPA will review such information and will notify the State whether or not the contingency provisions have been triggered per the schedule outlined in the Plan.

IV. Final Action

For the reasons discussed in our proposed action and herein, the EPA is taking final action to approve the Indian Wells Second Maintenance Plan, submitted by CARB on July 30, 2020, as a revision to the California SIP. We are approving the maintenance demonstration and contingency provisions as meeting all of the applicable requirements for maintenance plans and related contingency provisions in CAA section 175A. We are also finding the motor vehicle emissions budgets shown in Table 1 for 2020 and 2025 adequate and approving the budgets for transportation conformity purposes because we find they meet all applicable criteria for such budgets including the adequacy criteria under 40 CFR 93.118(e).

V. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR

²⁶ EPA Air Quality System Design Value Report, AMP480, accessed November 17, 2022 (User ID: STSAI, Report Request ID: 2058650).

52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001); and
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA.

The State did not evaluate environmental justice considerations as part of its SIP submittal. There is no information in the record inconsistent with the stated goals of E.O. 12898 of achieving environmental justice for people of color, low-income populations, and indigenous

peoples.

In addition, there are no areas of Indian country within the Indian Wells Valley planning area, and the state plan is not approved to apply on any Indian reservation land or in any other area where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

The Congressional Review Act, 5 U.S.C. section 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the *Federal Register*. A major rule cannot take effect until 60 days after it is published in the *Federal Register*. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by **[Insert date 60 days after date of publication in the *Federal Register*]**. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Ammonia, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Particulate matter, Reporting and recordkeeping requirements, Sulfur dioxide, Volatile organic compounds.

AUTHORITY: 42 U.S.C. 7401 *et seq.*

Dated: December 22, 2022.

Martha Guzman Aceves,
Regional Administrator,
Region IX.

Chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for part 52 continues to read as follows:

AUTHORITY: 42 U.S.C. 7401 *et seq.*

Subpart F—California

2. Section 52.220 is amended by adding paragraph (c)(594) to read as follows:

§52.220 Identification of plan - in part.

* * * * *

(c) * * *

(594) The following plan was submitted on July 30, 2020, by the Governor’s designee as an attachment to a letter dated July 23, 2020.

(i) [Reserved]

(ii) *Additional materials.* (A) Eastern Kern Air Pollution Control District.

(I) Indian Wells Valley Second 10-Year PM10 Maintenance Plan, adopted on June 25, 2020.

(2) [Reserved]

(B) [Reserved]

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